

REMARKS/ARGUMENTS

This case has been carefully reviewed and analyzed in view of the final Office Action dated 28 November 2006. Responsive to the rejections made in the Official Action, Claims 1, 11, 21, and 31 have been amended to clarify the combination of elements which form the invention of the subject Patent Application.

In the Official Action, the Examiner rejected Claims 1-3, 8-10, 11-13, 18-20, 21-23, 28-30, 31-33, and 38-40 under 35 U.S.C. § 103(a), as being unpatentable over Ichikawa, U.S. Published Patent Application 2004/0119700, in view of Moriya, et al., U.S. Published Patent Application 2003/0006975, and Westerman, et al., U.S. Published Patent Application 2005/0104867. Additionally, the Examiner acknowledged allowance of Claims 4-6, 14-16, 24-26 and 34-36.

Before discussing the prior art relied upon, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed, using Claim 1 as a representative structure. The invention of the subject Patent Application is directed to a capacitive touchpad integrated with key and handwriting functions. The touchpad includes a panel for capacitive touch input. The touchpad also includes a first pattern on a defined area of the panel representing a mode switch for selectively switching the touchpad between a key entry mode and a handwriting entry mode. The touchpad includes a plurality of

regions selectively defined on the panel responsive to the entry mode selected by actuation of the mode switch. Still further, the capacitive touchpad includes a plurality of second patterns selectively defined on the plurality of regions responsive to the selected entry mode for operation in the key and handwriting entry modes.

In contradistinction, the Ichikawa reference is directed to a touch sensitive input system in an apparatus such as a mobile telephone or PDA. The system includes a touchpad which receives information from a depression or force applied thereto (paragraph 20) and in particular, determines not only the position at which the force is applied to the touchpad, but also is adapted to determine how large of a force is being applied (paragraph 21). Because the application of excessive force is detrimental to the accurate determination of the input, due to non-linearities, the disclosed system detects the application of excessive forces and provides a warning display to a user indicating the location where excessive force has been applied (paragraph 35).

Thus, this reference discloses an input system which is pressure sensitive and clearly not a capacitive touchpad. The touchpad is sensitive to depression of an upper surface thereof (paragraph 27), and not responsive to receiving a signal from a user capacitively through a dielectric. Thus, there is no disclosure or suggestion of a panel for capacitive touch input, as now claimed.

Further, the reference is directed to a handwriting input device in which a user, utilizing a stylus “draws characters or signs on the pad 18 with the stylus 17”, paragraph 53. Nowhere does the reference disclose or suggest providing any means for switching between a key entry mode and a handwriting entry mode, as provided in the invention of the subject Patent Application. Thus, the reference fails to disclose or suggest a first pattern on a defined area of the panel representing a mode switch for selectively switching the touchpad between a key entry mode and a handwriting entry mode, as now claimed. Further, nowhere does the reference disclose or suggest a mode switch which is able to select between a mouse entry mode and a handwriting entry mode, or a key entry mode and a mouse entry mode, as defined in Claims 31 and 21, respectively.

The Moriya, et al. reference does not overcome the deficiencies of Ichikawa. The Moriya, et al. reference is directed to an input device for a personal digital assistant wherein a moveable module 20, in the form of a stylus or finger mounted element, transmits its position and orientation, with respect to a predefined region, to a stationary module 10. The stylus may have one or more manual pushbuttons which can be activated by a user, as well as a switch activated by the application of pressure applied to the tip of the stylus (paragraph 46). The stylus 20 is moved on a hard surface within the predefined region, which may have an image of a keyboard 42 formed on the surface, either directly, or in the form of a flexible overlay applied thereto. However, the panel or surface includes

no sensors and receives no input, as it is the circuitry within the stylus which determines position and transmits such to the stationary unit for coupling to the PDA.

Here again, the reference fails to disclose a panel for capacitive touch input, as now claimed. Further, the reference while switchable from a handwriting input to key entry input is apparently implemented by means of input to the PDA directly, as different software is required to interpret the positioning of the stylus for the entry of a particular key code corresponding to the location of the stylus. The system requires initial training of the software to establish a lookup table to define the corresponding positions with the (paragraphs 57 and 58). As the panel is simply a passive element, the reference fails to disclose or suggest a first pattern on a defined area of the panel representing a mode switch for selectively switching the touch pad between a key entry mode and a handwriting entry mode, as now claimed. Likewise, the reference fails to disclose any type of mode switch for selectively switching between a key entry mode and a mouse entry mode or between a mouse entry mode and a handwriting entry mode, as previously discussed.

The Westerman, et al. reference does not overcome the deficiencies of Ichikawa combined with Moriya, et al. The Westerman, et al. reference is directed to a capacitive input panel capable of tracking multiple finger and palm contacts. Sequential contact between a user's fingers and the panel are interpreted as a key

entry mode and the system responds identifying the key region nearest to the location of each finger tap and forwards the key symbols or commands associated therewith to the communication interface module 20 of the system. When a user makes simultaneous contact with two or more fingers, a key region adjacent to the multiple finger contacts is ignored and a chording motion recognizer produces cord tap or motion events, which represent a mouse entry sequence. Still further, when the user grips the stylus, a pen grip detection module detects the configuration of the user's hands and the system enters a handwriting entry mode. Thus, this system relies on detection of the configuration of the user's hand when it contacts the panel, rather than having a specifically defined area on the panel which is utilized to selectively switch the entry mode thereof. Therefore, the reference fails to disclose a first pattern on a defined area of the panel representing a mode switch for selectively switching the touch pad between key entry mode and a handwriting mode, or a key entry mode and a mouse entry mode, or a mouse entry mode and a handwriting entry mode, as now claimed.

As none of Ichikawa, Moriya, et al., or Westerman, et al. disclose or suggest a first pattern on a defined area of the panel which represents a mode switch by which a user can selectively switch the touch pad between different entry modes, they cannot, in combination, make obvious the concatenation of elements which form the invention of the subject Patent Application, as now claimed.

For all of the foregoing reasons, it is now believed that the subject Patent Application has been placed in condition for allowance, and such action is respectively requested.

If there are any further charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectively submitted,
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